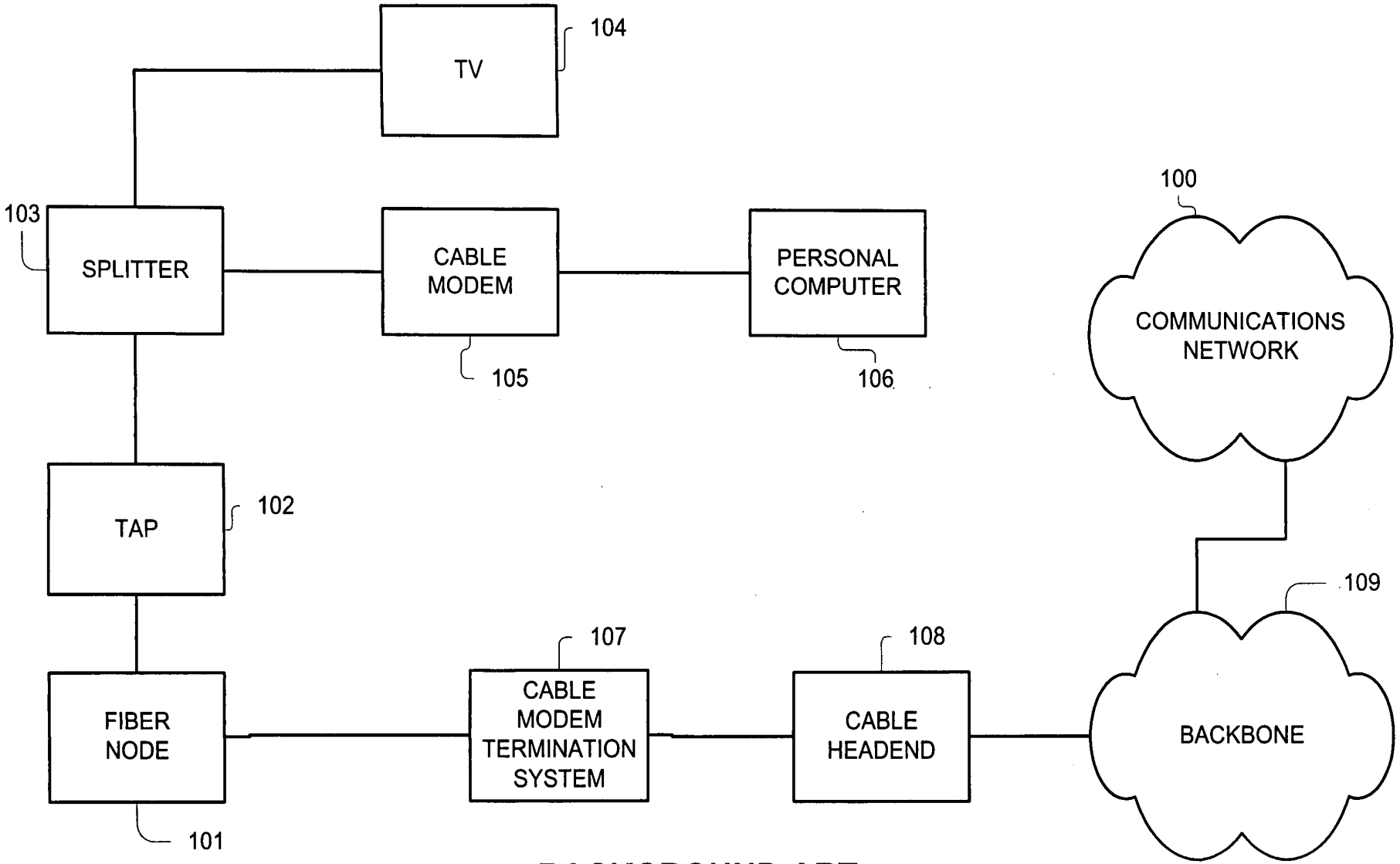
T09T20" 890h8260

FIGURE 1

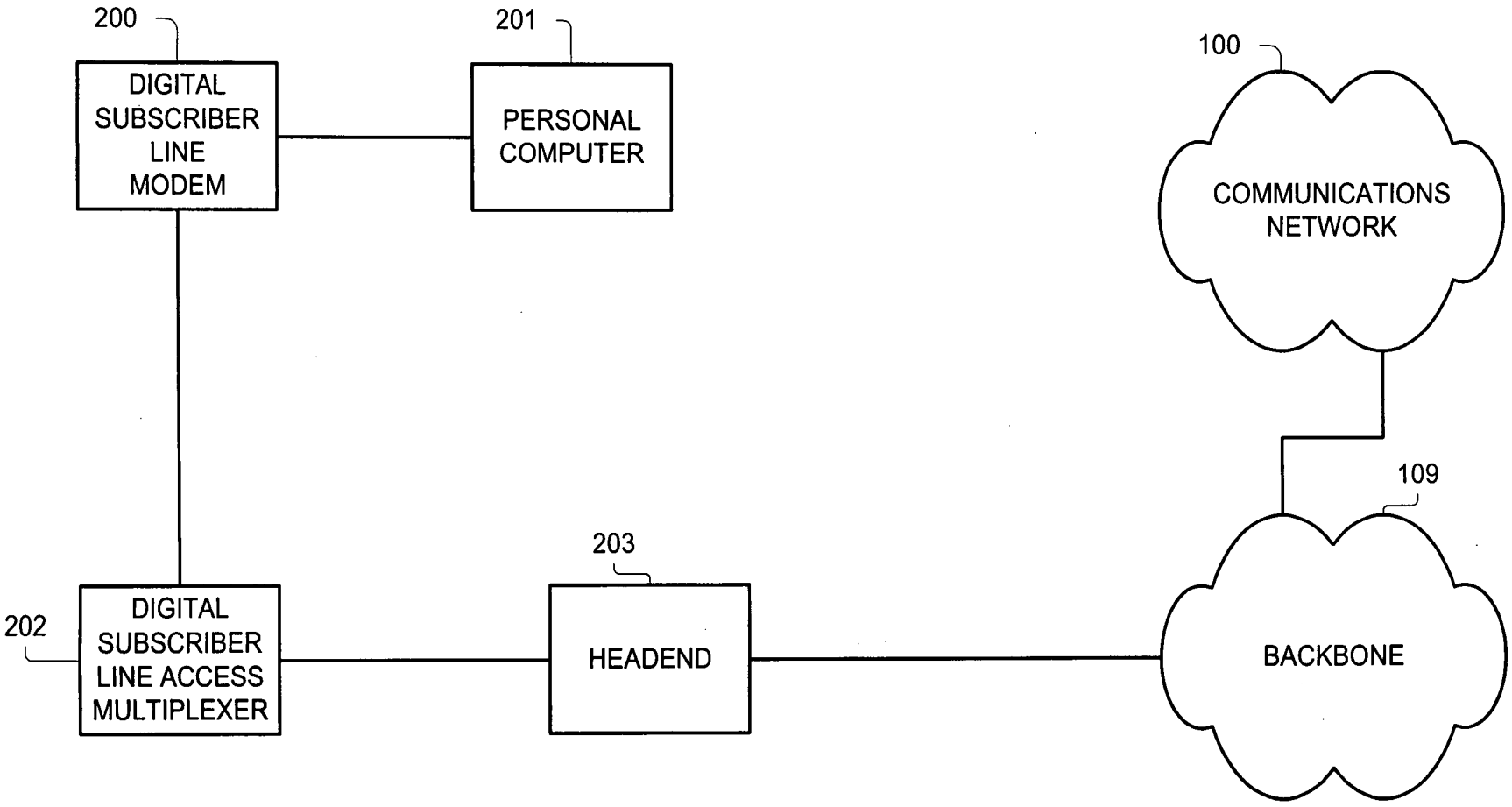


BACKGROUND ART

OBLON, SPIVAK, ET AL
DOCKET #: 202385US-8
INV: Ronald K. DOBES, et al.
SHEET 1 OF 15

T09T20"890h8Z60

FIGURE 2



BACKGROUND ART

OBLON, SPIVAK, ET AL
DOCKET #: 202385US-8
INV: Ronald K. DOBES, et al.
SHEET 2 OF 15

FIGURE 3

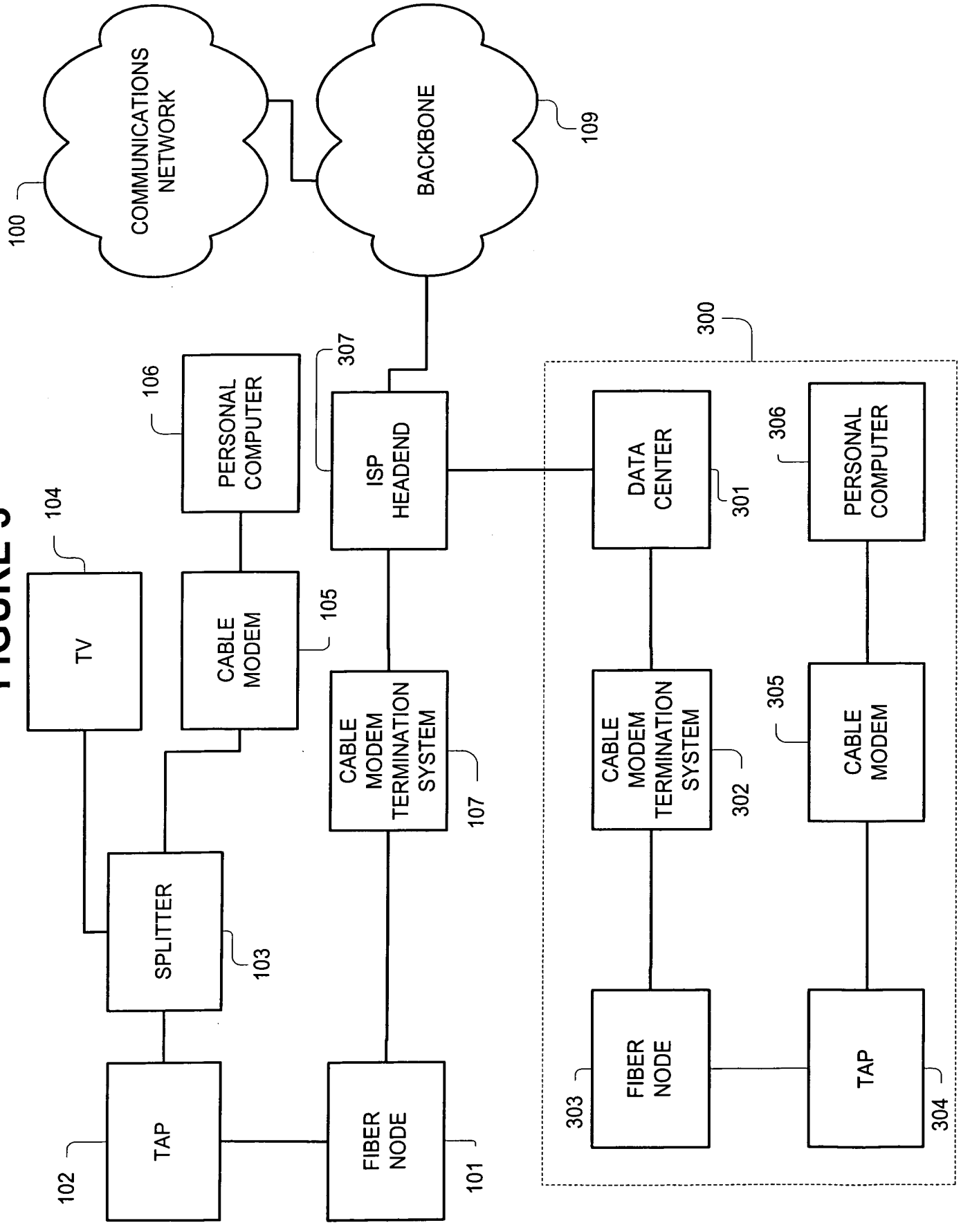

COMMUNICATIONS NETWORK
100
BACKBONE
109
300
PERSONAL COMPUTER
106
307
ISP HEADEND
DATA CENTER
301
306
PERSONAL COMPUTER
TV
104
CABLE MODEM
105
CABLE MODEM TERMINATION SYSTEM
107
CABLE MODEM TERMINATION SYSTEM
302
305
CABLE MODEM
SPLITTER
103
FIBER NODE
303
TAP
304
TAP
102
FIBER NODE
101

FIGURE 4

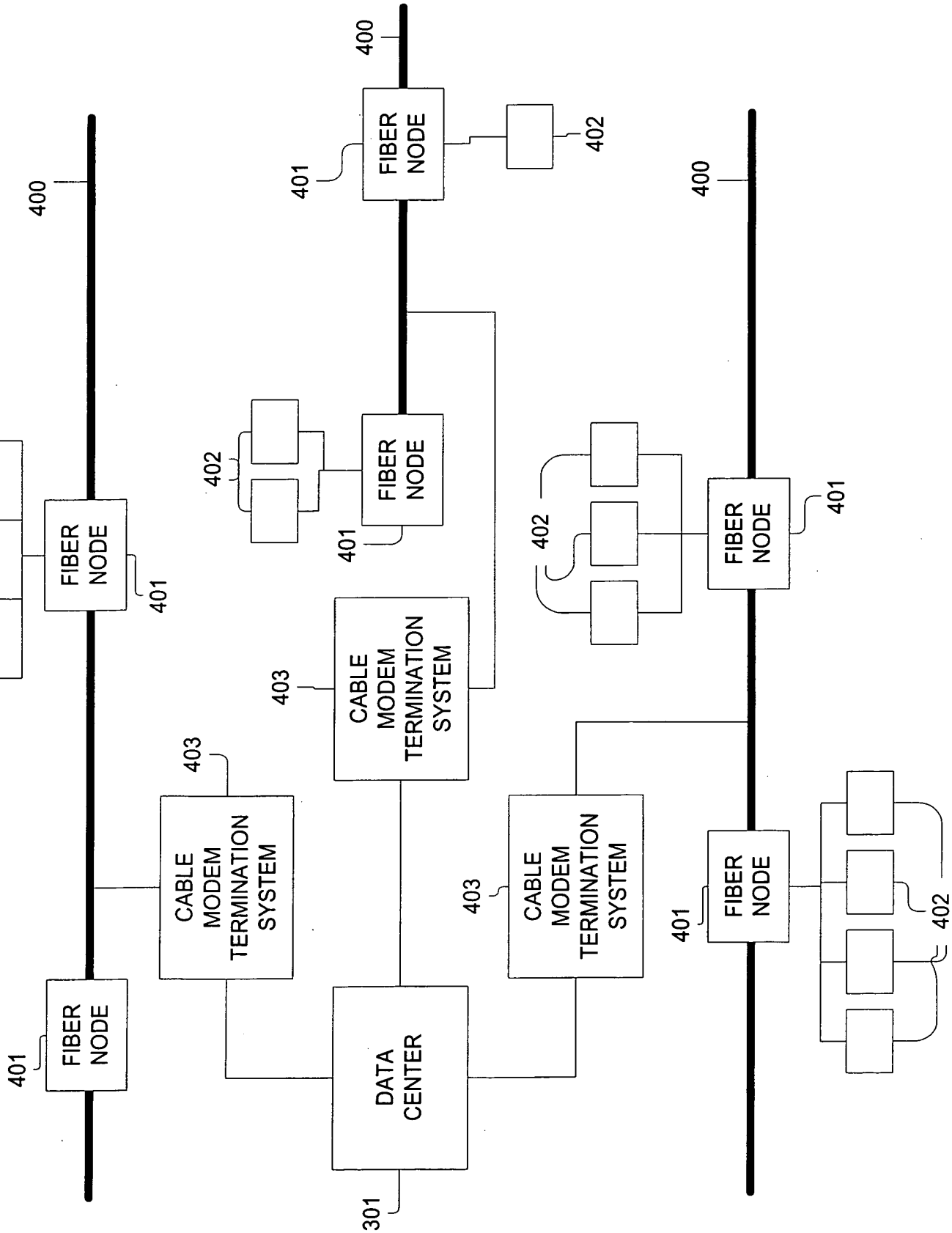

400
FIBER NODE
401
402
CABLE MODEM TERMINATION SYSTEM
403
DATA CENTER
301

FIGURE 5

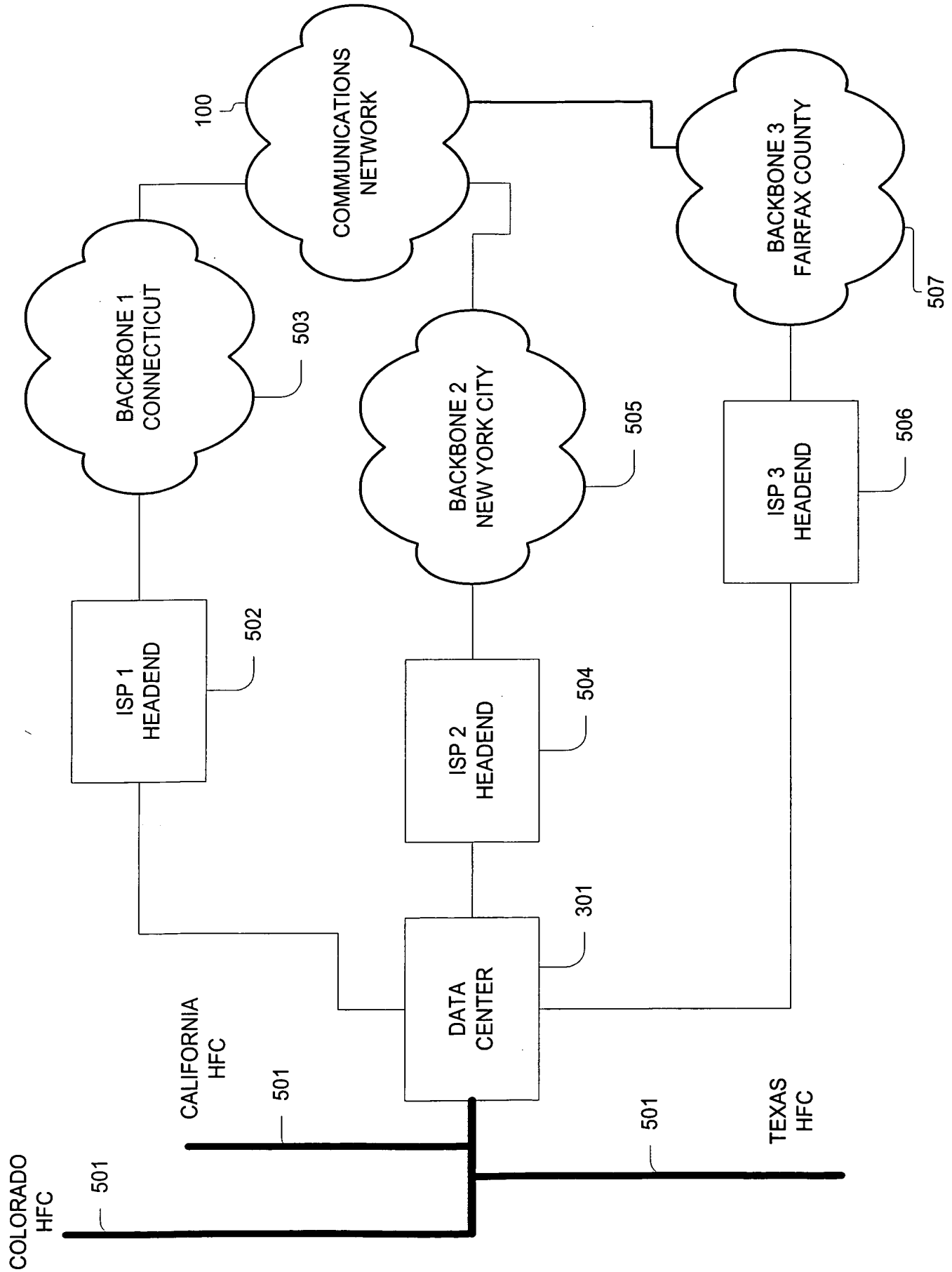
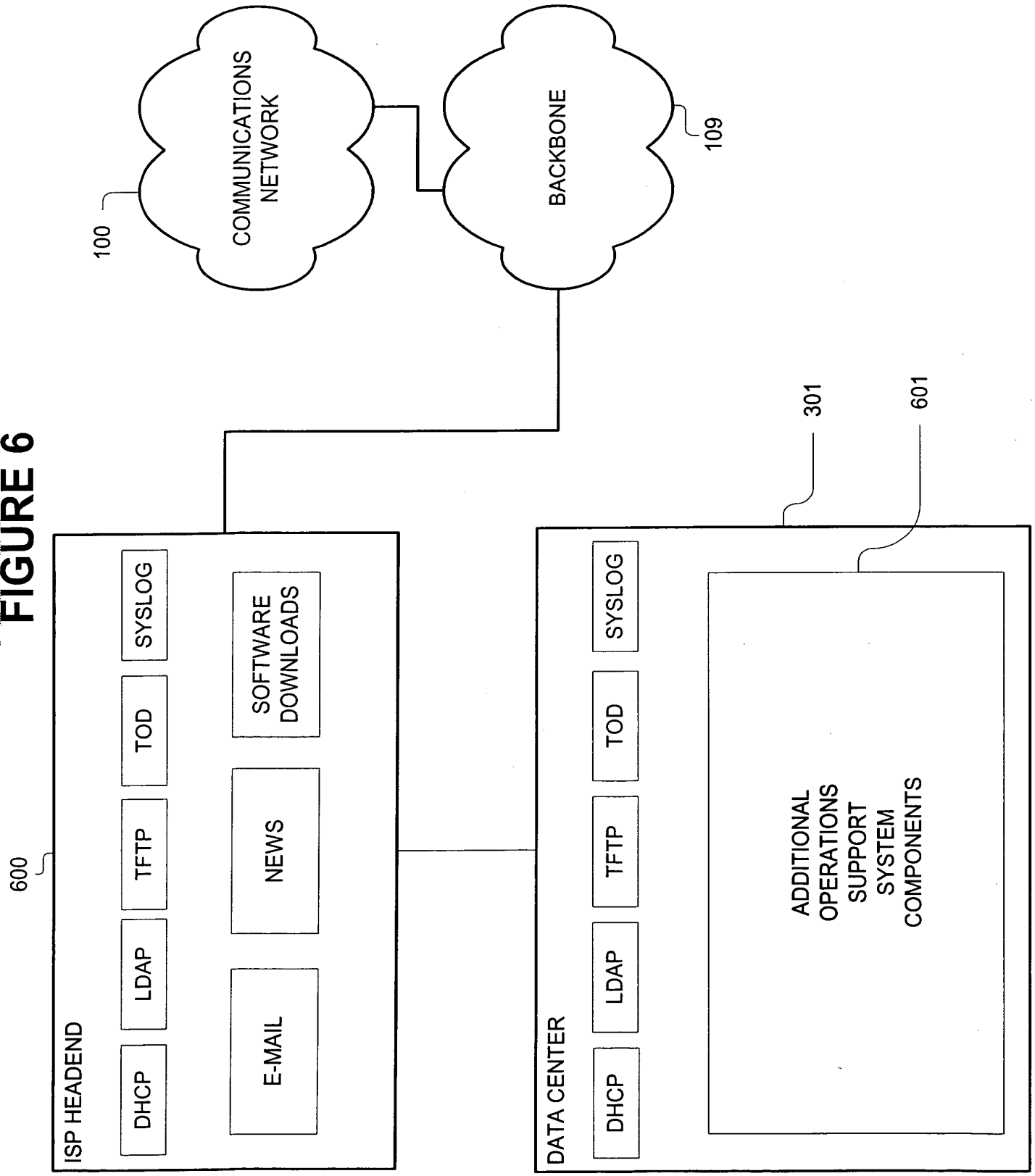

100
COMMUNICATIONS NETWORK
BACKBONE 1 CONNECTICUT
503
BACKBONE 2 NEW YORK CITY
505
BACKBONE 3 FAIRFAX COUNTY
507
ISP 1 HEADEND
502
ISP 2 HEADEND
504
ISP 3 HEADEND
506
DATA CENTER
301
COLORADO HFC
501
CALIFORNIA HFC
501
501
TEXAS HFC

FIGURE 6


COMMUNICATIONS NETWORK
100
BACKBONE
109
600
ISP HEADEND
DHCP
LDAP
TFTP
TOD
SYSLOG
E-MAIL
NEWS
SOFTWARE DOWNLOADS
301
601
DATA CENTER
DHCP
LDAP
TFTP
TOD
SYSLOG
ADDITIONAL OPERATIONS SUPPORT SYSTEM COMPONENTS

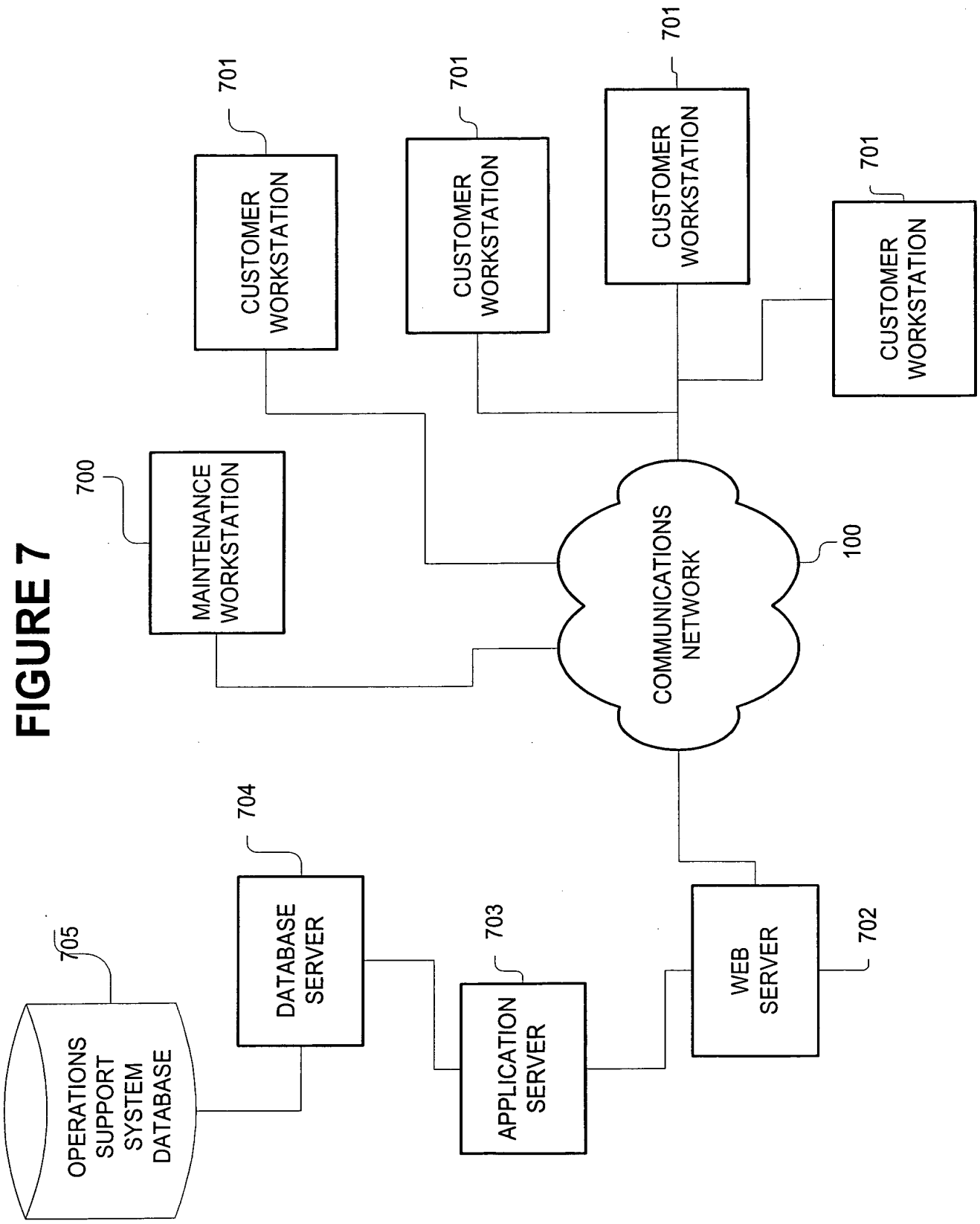
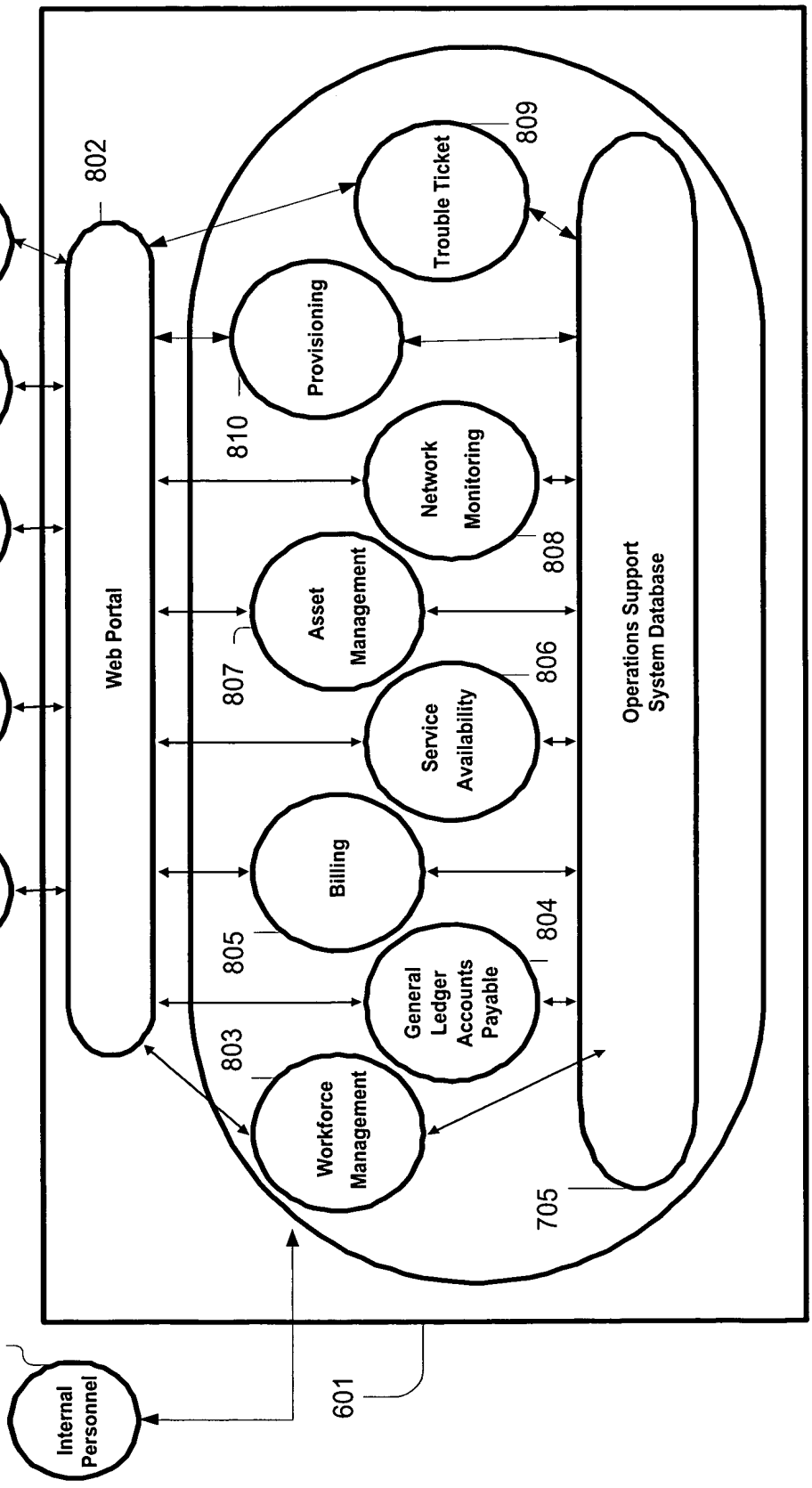


FIGURE 7

EV576204948US

FIGURE 8


800
Internal Personnel
601
Web Portal
802
End-User
811
Internal Personnel
800
Customer
801
Customer
801
Customer
801
Customer
801
Workforce Management
803
General Ledger Accounts Payable
804
Billing
805
Service Availability
806
Asset Management
807
Network Monitoring
808
Provisioning
810
Trouble Ticket
809
Operations Support System Database
705

T09T20" 890h8260

FIGURE 9

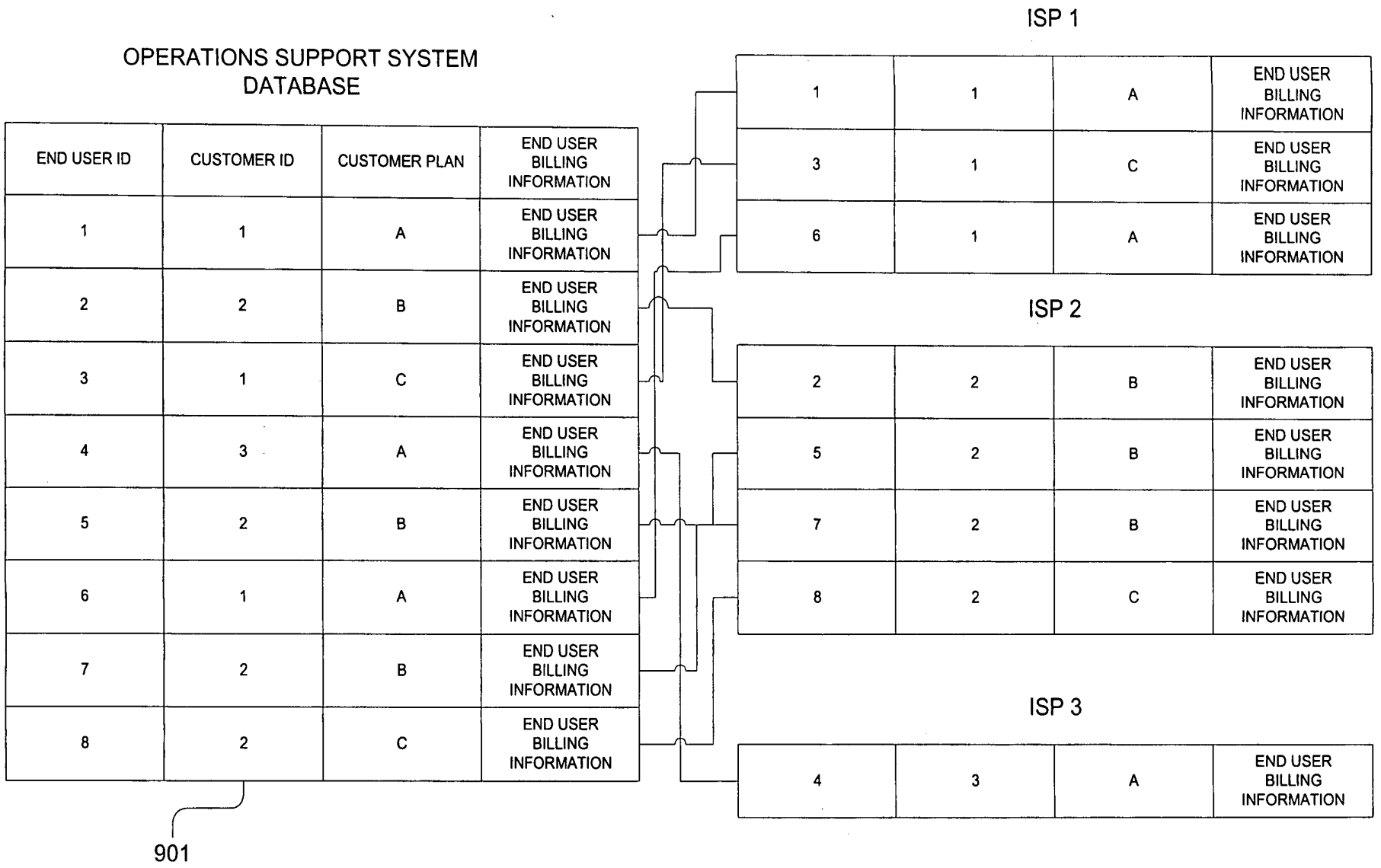


FIGURE 10

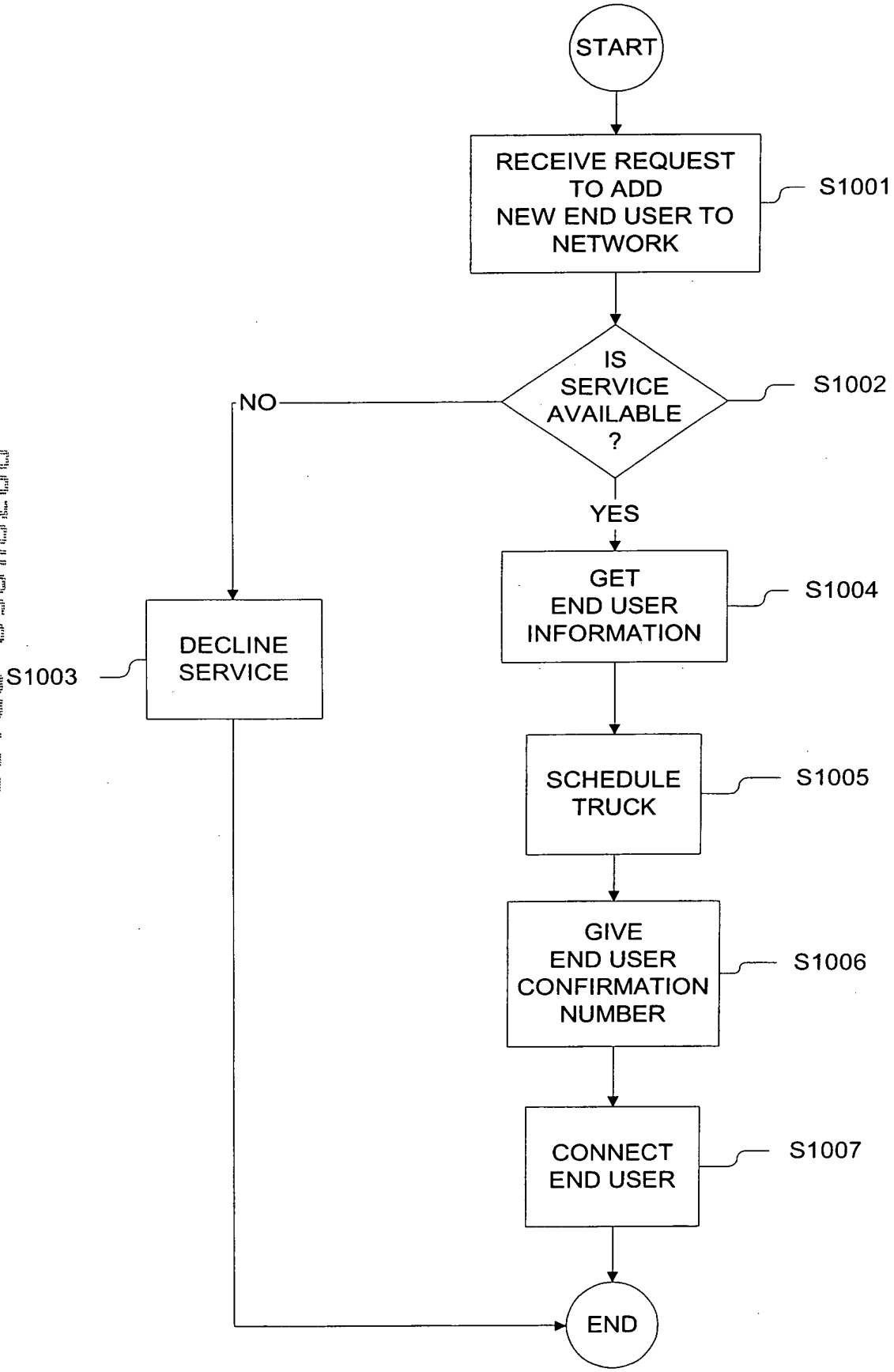

START
RECEIVE REQUEST TO ADD NEW END USER TO NETWORK
S1001
IS SERVICE AVAILABLE ?
S1002
NO
YES
DECLINE SERVICE
S1003
GET END USER INFORMATION
S1004
SCHEDULE TRUCK
S1005
GIVE END USER CONFIRMATION NUMBER
S1006
CONNECT END USER
S1007
END

FIGURE 11

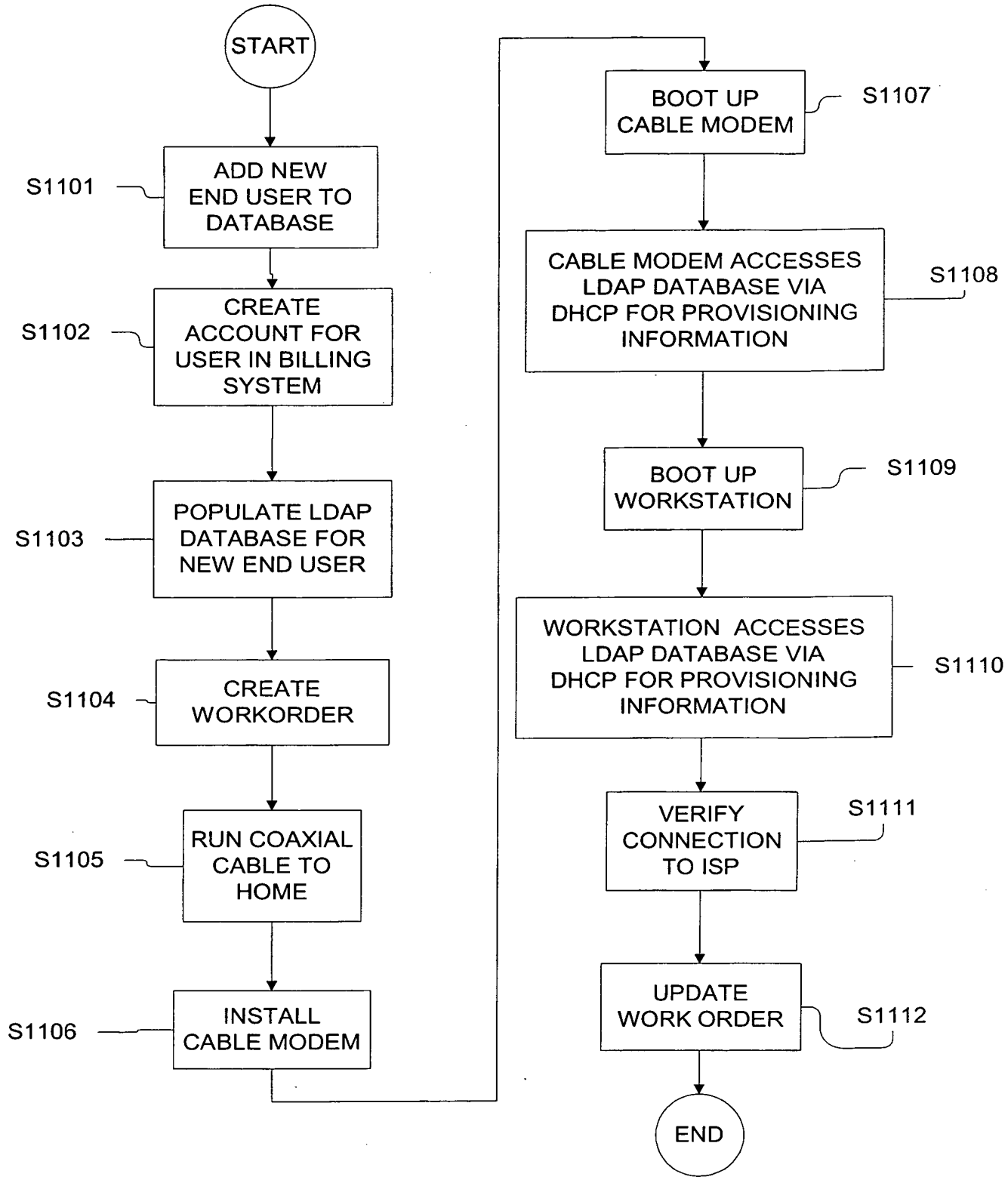

START
S1101
ADD NEW END USER TO DATABASE
S1102
CREATE ACCOUNT FOR USER IN BILLING SYSTEM
S1103
POPULATE LDAP DATABASE FOR NEW END USER
S1104
CREATE WORKORDER
S1105
RUN COAXIAL CABLE TO HOME
S1106
INSTALL CABLE MODEM
S1107
BOOT UP CABLE MODEM
S1108
CABLE MODEM ACCESSES LDAP DATABASE VIA DHCP FOR PROVISIONING INFORMATION
S1109
BOOT UP WORKSTATION
S1110
WORKSTATION ACCESSES LDAP DATABASE VIA DHCP FOR PROVISIONING INFORMATION
S1111
VERIFY CONNECTION TO ISP
S1112
UPDATE WORK ORDER
END

FIGURE 12

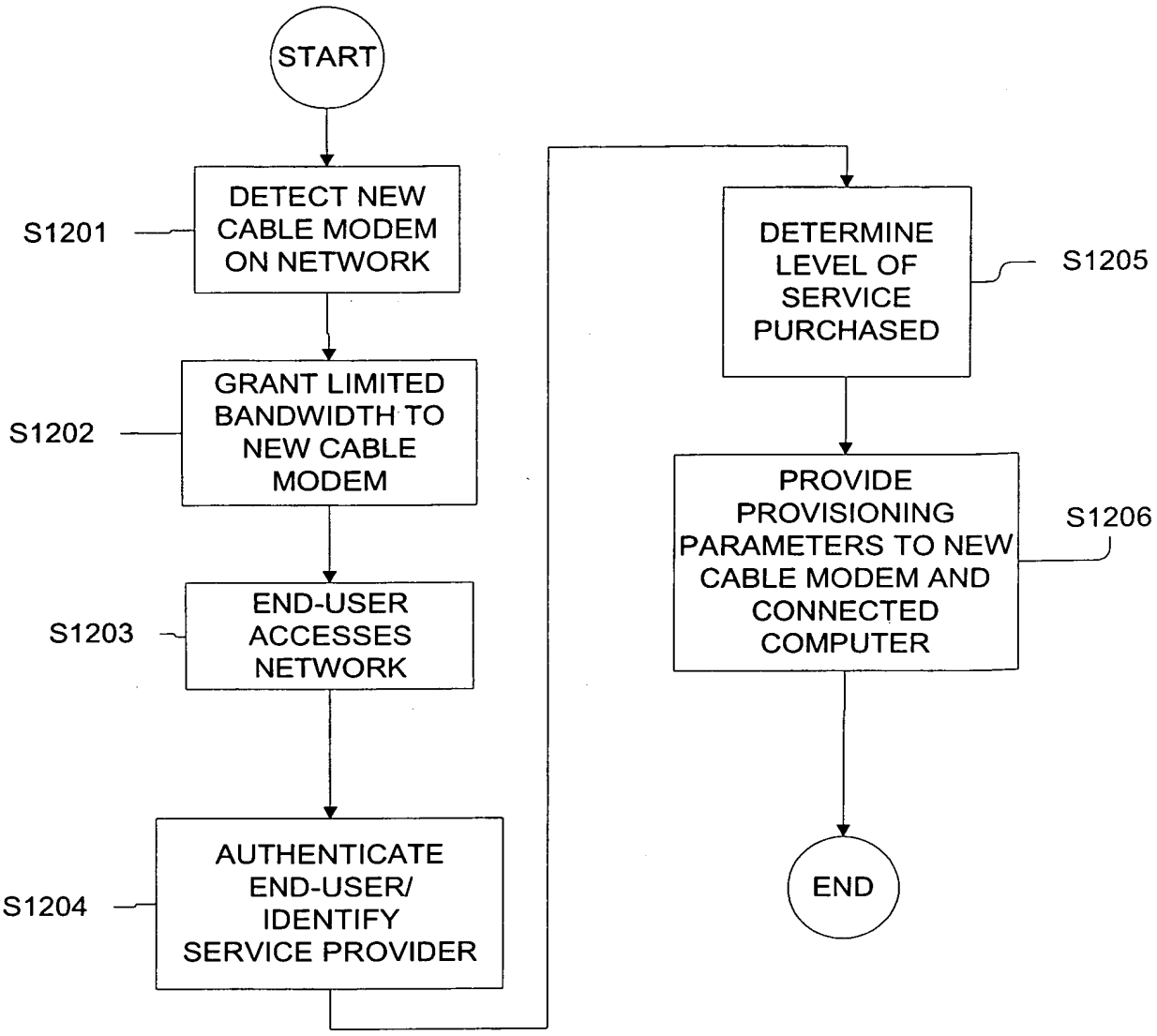


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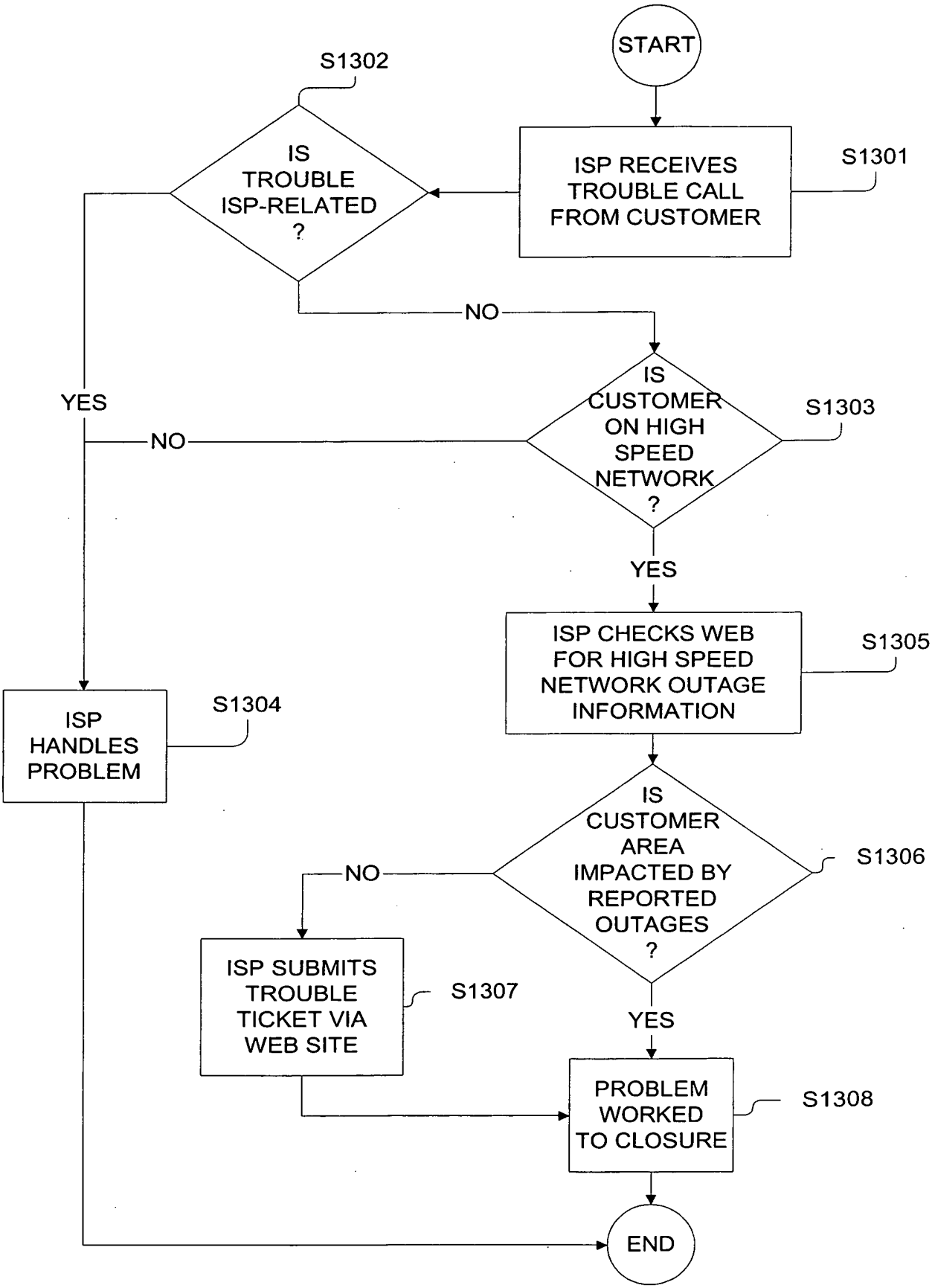
FIGURE 13



09768408.020160

FIGURE 14

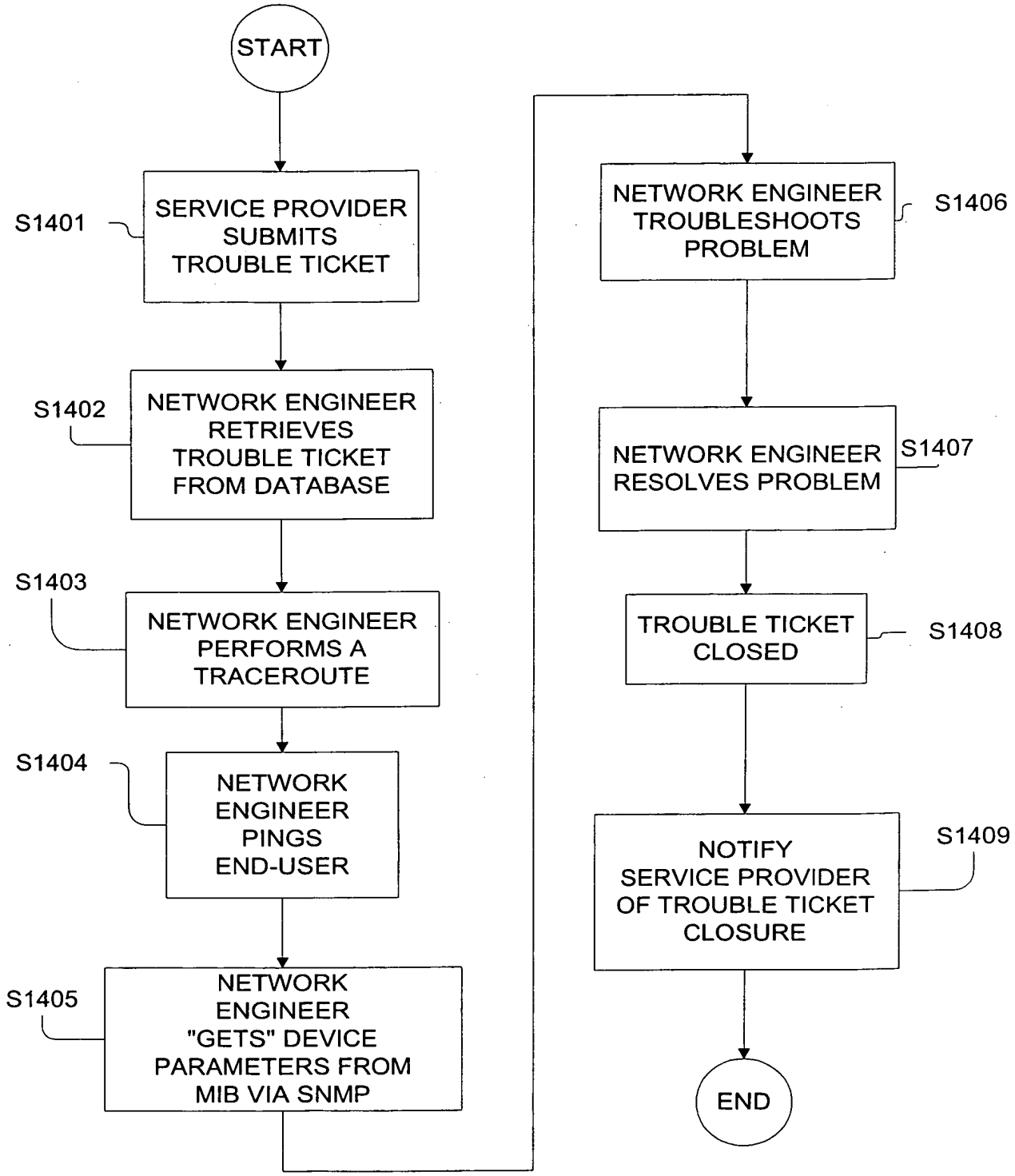
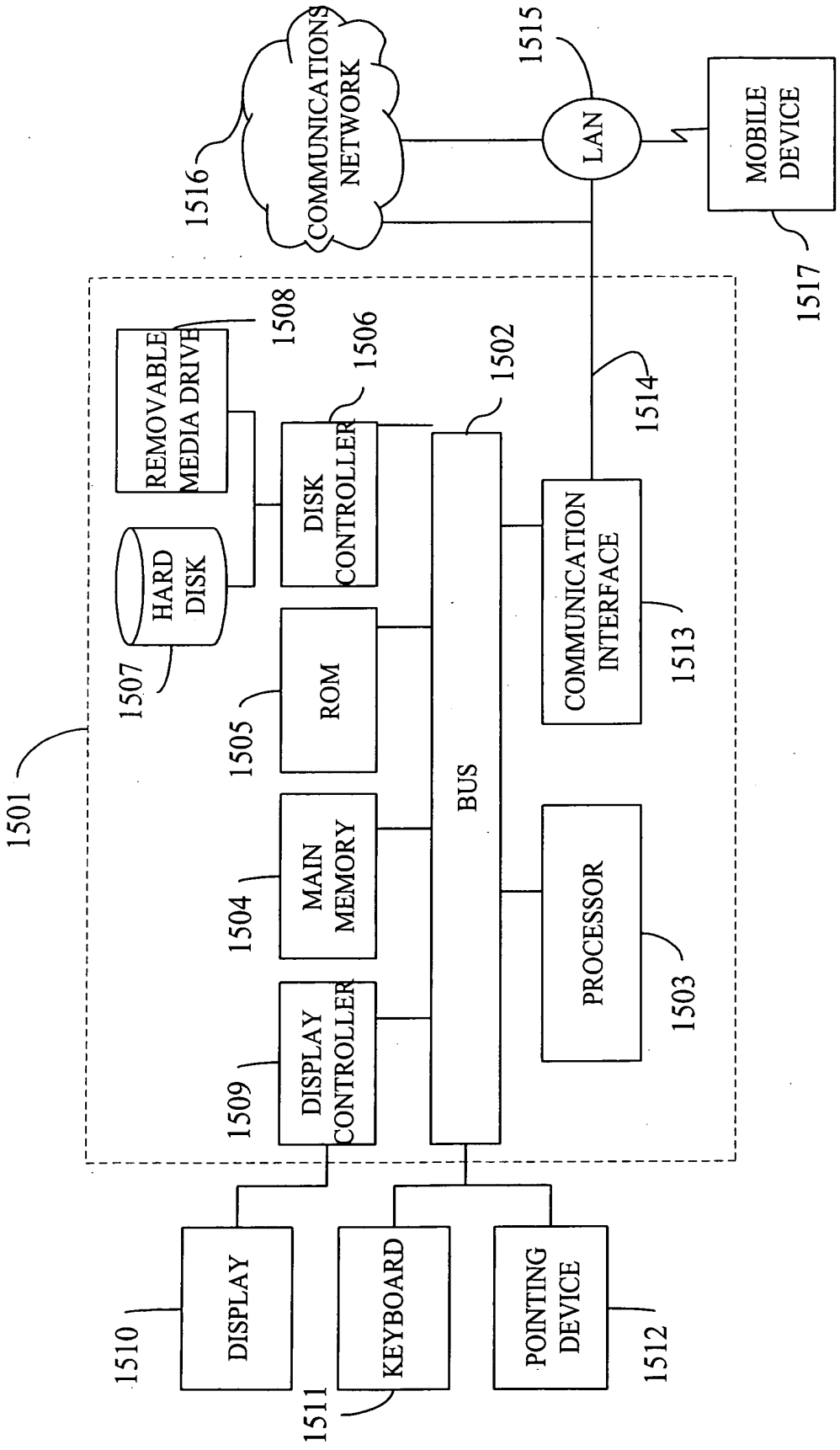

START
S1401
SERVICE PROVIDER SUBMITS TROUBLE TICKET
S1402
NETWORK ENGINEER RETRIEVES TROUBLE TICKET FROM DATABASE
S1403
NETWORK ENGINEER PERFORMS A TRACEROUTE
S1404
NETWORK ENGINEER PINGS END-USER
S1405
NETWORK ENGINEER "GETS" DEVICE PARAMETERS FROM MIB VIA SNMP
S1406
NETWORK ENGINEER TROUBLESHOOTS PROBLEM
S1407
NETWORK ENGINEER RESOLVES PROBLEM
S1408
TROUBLE TICKET CLOSED
S1409
NOTIFY SERVICE PROVIDER OF TROUBLE TICKET CLOSURE
END

FIGURE 15


1516
COMMUNICATIONS NETWORK
1515
LAN
MOBILE DEVICE
1517
1514
1502
1501
1508
REMOVABLE MEDIA DRIVE
1506
DISK CONTROLLER
HARD DISK
1507
1505
ROM
COMMUNICATION INTERFACE
1513
BUS
1504
MAIN MEMORY
PROCESSOR
1503
1509
DISPLAY CONTROLLER
1510
DISPLAY
KEYBOARD
1511
POINTING DEVICE
1512